Editorial Preface

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The thrust of 2(1) of the *International Journal of Information and Communication Technology Education* is predominantly focused in the area of teaching and learning with technology; five of the seven articles address the issues of technology in the classroom. They explore the gamut of information technology education from a research-based model for integrating technology across the curriculum to a practice-based expose on the impact of the educational psychologies of behaviorism, cognitivism, and constructivism on teaching with technology. The appropriateness of these examinations is amplified by established IGI publications including *Challenges of Information Technology Education in the 21st Century* and *Global Information Technology Education*, and newer texts such as *Advanced Methods in Distance Education* and the *Taxonomy for the Technology Domain* (book reviews on these publications are encouraged by IJICTE readers for subsequent issues of this journal).

A Model for Effectively Integrating Technology Across the Curriculum, by Graham and Semich, looks at three key phases of staff development: the training phase, the implementation phase, and the integration phase. Their research endeavor produced a sequential staff development schema for training higher education faculty. Their model helps instructors apply and eventually integrate technology across all of the academic disciplines, involving a transformation from the teacher-centered to the learner-centered classroom.

With a more practice-based bent, Hartsell’s paper, *Learning Theories and Technology: Practical Applications*, provides an overview of the three most widely accepted schools of educational psychology and how those distinctive learning theories can be applied to address practical uses of technology in the classroom. The author presents an overview of the principles and implications of each theory, followed by a summary describing its influences upon the way that technology can be utilized in instruction. The implications and applications fostered by each of the three schools were so well played out in the paper that the article receives the IJICTE Editor’s Award of Excellence for Issue 2(1). Congratulations to Dr. Taralynn Hartsell from the University of Southern Mississippi!

Sam E.O. Aduwa-Ogiegbaen and Raymond Uwameyi from the Faculty of Education, University of Benin, Nigeria, provide an international perspective on the influence of faculty affiliation and teaching experience on the use of the internet for instruction. They examined six first generation universities in Southern Nigeria; 476 faculty
members from nine faculties. Their questionnaire survey resulted in findings and recommendations from which many universities could benefit; specifically, justification for much needed additional investments in ICT facilities. Their methodology and data analysis are appropriate launching platforms for additional research.

Those interested in computer aided learning tools should review the extended work, *CAL Student Coaching Environment and Virtual Reality in Mechanical Engineering*, by S. Manjit Sidhu, N. Selvanathan, and S. Ramesha. For readers fascinated by computers and perception, visualization, 2-D graphics and animation, 3-D synthetic models and animation, and desktop virtual reality, this study presents the authors’ results and evaluation of the pedagogical effectiveness of computer aided learning. In general, their results show that certain CAL tools investigated by the authors instill a more pronounced sense of learning and user understanding of traditional engineering problems.

*Introducing ICT in a Traditional Higher Education Environment* completes the series of teaching and learning with technology articles with the review of yet another model for technology-based teaching. The traditional information transfer model encourages the transmission of knowledge from experts to learners by means of lectures and textbooks. The authors offer a new educational model based on constructivism for use in parallel with other well-known models for a more blended learning approach. Learn how they intend to merge various learning environments, organizational, educational and technological issues into an integrated whole. Consider their evaluation results as they build a flexible and cost-effective model based on three key concepts: web technology, simulation, and adaptation.

*E-Learning In Taiwan’s Higher Education*, by Ke Zhang of Texas Tech University, is our distance learning manuscript for this issue of the IJICTE. The policies, practices, and problems of Taiwan’s comprehensive e-learning initiatives are highlighted in this paper. The investigation includes a current status of the country’s e-learning in higher education, its e-learning policies and implementations, impact on policy makers, a critical analyses on related policies, and a thorough investigation on e-learning in all of the 147 four-year universities in Taiwan. The study identified fundamental problems in the implementation of Taiwan’s e-learning environment and generated suggestions to address these problems; suggestions that can easily apply to similar programs regardless of location. The paper provides valuable insights for not only policy makers and the system of higher education, but also e-learning vendors who seek to extend business to countries overseas in general and the broader Chinese-speaking market in particular.

The final paper was very much appreciated since it represents the focus area of communications technology education. *Telecommunications Courses in Information Systems Programs*, by Stephen Hawk and Thomas Witt, investigates undergraduate information system (IS) programs that integrate telecommunications courses into their curricula. A random sample of undergraduate programs was examined and data collected on various telecommunication course offerings. The outcome of the research found that telecommunications typically is not an area of emphasis; most information systems programs require only one telecommunications course and less than half provide any additional elective courses. Further, their research found that major programs of study typically embrace more telecommunications courses in their curricula than do programs of concentration only.

As you read these seven excellent articles in this issue of the *International Journal of Information and Communication*...
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